

NOTEWORTHY COLLECTIONS FROM THE SOUTHEASTERN UNITED STATES

Bruce A. Sorrie

University of North Carolina Herbarium
North Carolina Botanical Garden
Chapel Hill, North Carolina 27599-3280, U.S.A.
bruce.sorrie@ncmail.net

Richard J. LeBlond

University of North Carolina Herbarium
North Carolina Botanical Garden
Chapel Hill, North Carolina 27599-3280, U.S.A.
RichardLeBlond@charter.net

ABSTRACT

Fieldwork and herbarium studies have uncovered new or overlooked state records for 23 species: *Agalinis divaricata*, *Cyperus grayi*, *Dichanthelium annulum*, *Echinodorus tenellus*, *Eleocharis engelmannii*, *Fimbristylis schoenoides*, *Gaylussacia nana*, *Hypericum lloydii*, *Juncus dudleyi*, *Juncus interior*, *Juncus militaris*, *Juncus nodatus*, *Juncus subcaudatus*, *Kalmia angustifolia*, *Lipocarpa drummondii*, *Panicum dichotomiflorum* var. *puritanorum*, *Polygala leptostachys*, *Pycnanthemum flexuosum*, *Rhynchospora cephalantha* var. *attenuata*, *Sagittaria chapmanii*, *Sclerolepis uniflora*, *Utricularia juncea*, *Yeatesia viridiflora*. For 8 other species, the reports herein represent significant distributional records or represent the only known current records for states: *Agalinis filifolia*, *Aletris lutea*, *Boltonia diffusa*, *Fuirena pumila*, *Juncus articulatus*, *Leucospora multifida*, *Polygonum glaucum*, *Yucca gloriosa*.

RESUMEN

Estudios de campo y de herbario han dado como resultado nuevas citas y otras pasadas por alto de 23 especies: *Agalinis divaricata*, *Cyperus grayi*, *Dichanthelium annulum*, *Echinodorus tenellus*, *Eleocharis engelmannii*, *Fimbristylis schoenoides*, *Gaylussacia nana*, *Hypericum lloydii*, *Juncus dudleyi*, *Juncus interior*, *Juncus militaris*, *Juncus nodatus*, *Juncus subcaudatus*, *Kalmia angustifolia*, *Lipocarpa drummondii*, *Panicum dichotomiflorum* var. *puritanorum*, *Polygala leptostachys*, *Pycnanthemum flexuosum*, *Rhynchospora cephalantha* var. *attenuata*, *Sagittaria chapmanii*, *Sclerolepis uniflora*, *Utricularia juncea*, *Yeatesia viridiflora*. De otras 8 especies, las citas presentes son importantes o representan las únicas conocidas actualmente para los estados: *Agalinis filifolia*, *Aletris lutea*, *Boltonia diffusa*, *Fuirena pumila*, *Juncus articulatus*, *Leucospora multifida*, *Polygonum glaucum*, *Yucca gloriosa*.

INTRODUCTION

We have conducted botanical fieldwork and herbarium studies in the southeastern United States coastal plain since 1990. In part, this work was directly related to our occupation as biologists with the North Carolina Natural Heritage Program, in part as a result of contract work to produce status surveys of rare plant taxa for the U.S. Fish & Wildlife Service, and in part related to ongoing taxonomic studies as Research Associates at the University of North Carolina herbarium (NCU). In addition, the senior author has searched many national and local herbaria while preparing county-level range maps for over 1000 endemic coastal plain taxa. These studies have yielded a large number of noteworthy records, some of which have been published (e.g., Sorrie & Leonard 1999; LeBlond & Sorrie 2001).

In the course of this work we visited over two dozen major herbaria with significant holdings of coastal plain plants (see Acknowledgments for those which hold vouchers cited herein). These efforts have resulted in the discovery of new state records for twenty three species of vascular plants in the southeastern United States. For eight other species, the vouchers cited below represent significant range extensions or represent the only known current records in specific states. Scientific names follow published volumes of *Flora North America*; otherwise they follow Weakley (2007). Herbarium acronyms are those of Holmgren et al. (1990).

ACANTHACEAE

Yeatesia viridiflora (Nees) Small (= *Dicliptera halei* Riddell). A widespread but sparsely distributed species of the Gulf Coastal Plain from northwestern Florida and southwestern Georgia to eastern Texas. The map in Hilsenbeck (1989) depicts a generous range which also includes most of Alabama, Mississippi, and Louisiana, plus a tiny portion of Tennessee. The latter state was listed by Small (1896), but we have seen no specimen

and *Y. viridiflora* does not appear in the Tennessee Atlas (Chester et al. 1997). In Alabama (Alabama Flora Committee 2004) and Louisiana (Thomas & Allen 1996) this species is decidedly local, being absent from large portions of each. We can find no records for Arkansas (Smith 1988) and Mississippi (Kartesz 1999); the following are the first records for these states.

Voucher specimens: **ARKANSAS: Dallas Co.:** fertile wooded hillsides, Thatcher's Bluff, P.O. Sardis, elev. 250, 27 Jun 1964, *D. Demaree* 50592 (BRIT). **MISSISSIPPI: Wayne Co.:** Bucatunna Creek ca. 7 mi E of Waynesboro, T8N R5W, 11 Oct 1970, *K.E. Rogers* 4777 with *R. Watson* (MISS).

AGAVACEAE

Yucca gloriosa L. This species of maritime habitats is uncommon from North Carolina to Georgia, and rare from Florida to Louisiana. This is apparently the third county of occurrence in Florida (Atlas of Florida Vascular Plants 2007) and the only one from the west coast of the peninsula.

Voucher specimen: **FLORIDA: Pinellas Co.:** occasional in foredunes, west coast of Caladesi Island, 2 Jun 1963, *R.H. Wagner* 876 (DUKE).

ALISMATACEAE

Echinodorus tenellus (Mart.) Buch. (= *E. parvulus* Engelm.). Haynes and Hellquist (2000) map this diminutive annual in ten states (but read Va. for Vt.). However, it occurs in seven other states as documented by Tatnall (1946) for Delaware, Jones (2005) for Kentucky, Thomas and Allen (1993) for Louisiana, Steyermark (1963) for Missouri, Stone (1911) for New Jersey, Taylor and Taylor (1994) for Oklahoma, and LeBlond and Sorrie (2001) for North Carolina. The following are the first published records for Arkansas and Mississippi.

Voucher specimens: **ARKANSAS: Baxter Co.:** WSW of Mt. Home, small stock pond along roadside, 26 Oct 1974, *B.L. Lipscomb* 992 (BRIT). **MISSISSIPPI: Lamar Co.:** 3 mi W of Purvis, abundant on edge of lake, 29 Aug 1973, *K.E. Rogers* 9223 (GA, NCU, VDB); same location (Mossy Pond), 1 Sep 1998, *B.A. Sorrie* 9924 with *S.W. Leonard* (GH).

Sagittaria chapmanii (J.G. Smith) C. Mohr. Haynes and Hellquist (2000) treat this entity as *S. graminea* Michx. ssp. *chapmanii* (J.G. Smith) R.R. Haynes and C.B. Hellquist, but analyses of allozyme variation by Hauber and Lege (1999) argue convincingly that *S. graminea* and *S. platyphylla* (Engelm.) J.G. Smith are more closely related to each other than either is to *S. chapmanii*. We therefore follow Weakley (2007) in treating *S. chapmanii* as a full species. This species is notable among our *Sagittaria* in having branched inflorescences. Haynes and Hellquist (2000) map it in South Carolina, Georgia, Florida, and Alabama; LeBlond and Sorrie (2001) document it from North Carolina; Majure (2007) reports it from Mississippi. These are the first records for Louisiana, Texas, and Arkansas.

Voucher specimens: **ARKANSAS: Bradley Co.:** Johnsonville Prairie, 5.9 mi SW of Johnsonville on unnamed road, Sec. 23, T16S, R9W, flat open prairie and sparse woods, 5 Aug 1984, *R.D. Thomas* 90284 (NLU); **Calhoun Co.:** along dirt road in flat pine woods 1 mi S of Arkansas 4, ca. 6 mi W of Hampton and US 167, 30 May 1990, *R.D. Thomas* 118250 (NLU). **LOUISIANA: Allen Parish:** wood road 1 mi W of highway 165, 1 mi N of Oakdale, 17 Aug 1979, *S. Darwin* 1973 with *E. Sundell* (NLU); **Beauregard Parish:** sandy roadside 3 mi S of De Ridder, 11 Jul 1970, *Northwest State College Biology Class* s.n. (NLU); **Bossier Parish:** ca. 2 mi N of Benton, water of ditch along road, 7 Aug 1938, *D.S. Correll* 10131 with *H.B. Correll* (DUKE); **Livingston Parish:** mixed forest along Big Branch, SE of Holden, 19 Mar 1975, *C.M. Allen* 6426 (DUKE); **Natchitoches Parish:** roadbank at Cypress Branch, 4 mi W of Mora, 30 Apr 1972, *R.D. Thomas* 28600 (NLU); **Rapides Parish:** 5 mi S of Pineville, shallow water of roadside pond in pine woods, 21 Oct 1966, *J.W. Thieret* 25012 (DUKE); **St. Tammany Parish:** pine woods W of Louisiana 41, E of Lacombe Bayou, N of Hickory Fire Tower, 19 Jun 1976, *R.D. Thomas* 49523 (NLU); ca. 5 mi NW of Slidell, disturbed largely pine woods in Sec. 26, 12 Jun 1968, *J.W. Thieret* 29206 (DUKE). **TEXAS: Grimes Co.:** near highway 1774, 7 mi SE of Plantersville, fairly common in ditch near railroad tracks, no standing water, 1 Jul 1969, *J.J. Sperry* s.n. (BRIT).

ASTERACEAE

Boltonia diffusa Elliott. Radford et al. (1968) include this species within their concept of *B. caroliniana* (Walter) Fernald, but Karaman-Castro and Urbatsch (2006) recognize them as distinct species and map *B. diffusa* in North Carolina and southward. We are aware of only a single historical specimen in North Carolina: *H.E. Ahles* 19986 (NCU) from Stanly County in 1956. The following vouchers provide current documentation. Since all records are from highly disturbed habitats, the native/alien status of this species in the state is uncertain.

Voucher specimens: **NORTH CAROLINA: Anson Co.:** abundant in disturbed roadsides, narrow powerline, and loblolly pine plantation, SR 1121 N of Leggett Branch, 11 Oct 2007, B.A. Sorrie 12047 (NCU); **Moore Co.:** abundant in dry clearing in floodplain of Little River just downstream from confluence with Nick's Creek, 21 Aug 2007, B.A. Sorrie 12003 (NCU, US).

Sclerolepis uniflora (Walter) B.S.P. A coastal plain endemic of periodically inundated wetlands, this species ranges from New Hampshire to Florida and Alabama (Lamont 2006). *Sclerolepis uniflora* is not included for Louisiana by Thomas and Allen (1993) or for Mississippi by Kartesz (1999). The following records establish its presence in Louisiana and Mississippi.

Voucher specimens: **LOUISIANA: St. Tammany Parish:** extensive mats growing in shallow water, woods road through wet slash pine-pond cypress forest, Talisheek Wetlands Preserve, 2 Jun 1999, L. Smith s.n. (LSU, NLU). **MISSISSIPPI: George Co.:** 9.1 mi E of route 63 on US 98, savanna-like area, 26 May 1973, D. Boufford 9441 with H.E. Ahles (GH).

CYPERACEAE

Cyperus grayi Torr. Gray's umbrella-sedge occurs in dry sandy woods and coastal dunes primarily along the Atlantic and Gulf Coastal Plain from New Hampshire to Alabama (Kartesz 1999) and Mississippi (Radford et al. 1968). It is indicated as absent from Florida by Kartesz (1999), Tucker, Marcks, and Carter (2002), USDA NRCS (2007), and the Atlas of Florida Vascular Plants (2007). This is the first record for Florida.

Voucher specimen: **FLORIDA: Liberty Co.:** Apalachicola Bluffs and Ravines Preserve near Bristol, 4 Jun 1991, R.J. LeBlond 2171 (FSU).

Eleocharis engelmannii Steud. A widespread species in the United States and southern Canada, but rarely collected in the southern Atlantic and Gulf Coastal Plains. Thomas and Allen (1993) do not include it for Louisiana; this is the first record for that state.

Voucher specimen: **LOUISIANA: Jeff Davis Parish:** along West Bayou Lacassine, 23 Sep 1967, J.W. Thieret 27938 (DUKE).

Fimbristylis schoenoides (Retz.) Vahl. This fimbry sedge, introduced from Asia, has been documented from Georgia and Florida west to Louisiana (Kral 2002a). This is the first known North Carolina collection.

Voucher specimen: **NORTH CAROLINA: Hyde Co.:** Ocracoke Island, in maritime wet grassland along N side of NC 12, 0.1 mi E of Cape Hatteras National Seashore boundary sign just SE of Ocracoke village, 17 Oct 2005, R.J. LeBlond 6154 (NCU).

Fuirena pumila (Torr.) Spreng. This specialist of ponded depressions, sinkhole ponds, and glacial kettle-hole ponds is scattered along the Atlantic and Gulf states from Massachusetts to Florida and Texas, with disjunctions to the Great Lakes region. Majure (2007) reports it from two Mississippi counties. This is the third record for Mississippi.

Voucher specimens: **MISSISSIPPI: Lamar Co.:** Mossy Pond, 3 mi W of Purvis, 1 Sep 1998, B.A. Sorrie 9928 with S.W. Leonard (GH, MISS, NCU).

Lipocarpa drummondii (Nees) G.C. Tucker. Tucker (2002) does not include Louisiana in the range of this diminutive annual, and Thomas and Allen (1993) do not include it. The specimen cited below differs from *L. micrantha* (Vahl) G.C. Tucker in possessing second scales 0.7 mm long. This is the first record for Louisiana.

Voucher specimen: **LOUISIANA: Caddo Parish:** woods and edge of wood along railroad, Section 6, ca. ¾ mi SE of Reiser, 7 Jul 1970, J.W. Thieret 32137 (NCU).

Rhynchospora cephalantha A. Gray var. **attenuata** Gale. Kral (2002b) synonymizes this variety under nominate *R. cephalantha*, which ranges from New York to Florida and Texas. However, LeBlond in Weakley (2007) recognizes it as distinct, due to its narrower and shorter achenes and its tendency to produce hemispherical heads (vs. subglobose to globose). In addition, var. *attenuata* inhabits wooded streamheads, baygalls, and semi-open seepage slopes, rather than savannas, marshes, and other open habitats occupied by var. *cephalantha*. In our experience var. *attenuata* is not a rare plant, but merely overlooked. Gale (1944)

cites specimens of var. *attenuata* from North Carolina, South Carolina, Alabama, and Mississippi. Thomas and Allen (1993) do not mention this variety, even in synonymy, for Louisiana. This is the first record for that state.

Voucher specimens: **LOUISIANA: Vernon Parish:** woods along unmarked road at Drake's Creek just S of Fort Polk in Kisatchie National Forest, ca. 1.5 mi E of Johnsonville Church and Louisiana route 10, 7 Sep 1987, R.D. Thomas 101449 with C.M. Allen (NLU).

ERICACEAE

Gaylussacia nana (A. Gray) Small. Luteyn et al. (1996) list this shrub for Alabama, Florida, Georgia, and Tennessee. This species is not listed for North Carolina (Radford et al. 1968), Mississippi (Kartesz 1999), or Louisiana (Thomas and Allen 1993); these are the first records. The Louisiana specimen does not give parish name and it is unlikely to have been collected in Orleans Parish, but rather in adjacent St. Tammany, Tangipahoa, or Washington Parishes where suitable pinelands occurred.

Voucher specimens: **LOUISIANA:** "New Orleans," 1832, T. Drummond s.n. (GH). **MISSISSIPPI: Harrison Co.:** Handsboro, low wet pine woods, 29 May 1951, D. Demaree 30621 (GH); Mississippi City, low wet woods, 1 Jun 1951, D. Demaree 30677 (DUKE); sandy open pine ridges, Mississippi City Post Office, 9 Jun 1954, D. Demaree 35539 (GH); DeSoto National Forest, N of Krohn cemetery, W of Old Biloxi Road, rolling dry longleaf pine upland, 18 Apr 1997, B.A. Sorrie 9158 (GH, MISS, NCU); DeSoto National Forest, N of White Star Road, hilltop under longleaf pine, oak, and dogwood, 22 May 1997, B.A. Sorrie 9248 (MISS, NCU); **Jackson Co.:** Ocean Springs, 4 Apr 1889, F.S. Earle s.n. (DUKE); Ocean Springs, 18 Jun 1895, J. Skehan s.n. (GH); Fontainebleau Point, 11 Jun 1954, D. Demaree 35561 (GH); Cedar Creek NE of Orange Grove, local in sandy pine woods near low bog, 15 Apr 1964, S. McDaniel 4185 (FSU, IBE); **NORTH CAROLINA: New Hanover Co.:** pine/scrub oak sandhill habitat W of Wilmington Beach, 22 Jun 1997, R.J. LeBlond 4761 with A.S. Weakley (FLAS); same location, 23 Oct 2002, R.J. LeBlond 5748 (NCU). The 1997 record was erroneously reported as *G. tomentosa* (A. Gray) Pursh ex Small by LeBlond and Sorrie (2001).

Kalmia angustifolia L. The two eastern North American "sheep laurels," *Kalmia angustifolia* and *K. carolina* Small, were treated as full species by Southall and Hardin (1974) but as varieties of *K. angustifolia* by Ebinger (1974). The ranges of these taxa overlap in a small area of southeastern Virginia. Recent field and herbarium studies suggest that hybridization is rare, which supports species status (Sorrie and Weakley ms.). Heretofore, *K. angustifolia* had not been reported from North Carolina (Radford et al. 1968); the following provides documentation.

Voucher specimens: **NORTH CAROLINA: Gates Co.:** Wyanoke area, 3.5 km NE of Riddicksville, area of deep sand deposits, abundant understory species, 9 Aug 2005, J. Townsend 3486 (NCU, VPI); same data but 3.9 km NE of Riddicksville, J. Townsend 3487 (NCU, VPI).

HYPERICACEAE

Hypericum lloydii (Svenson) W.P. Adams. This dwarf shrub occurs in the lower piedmont and upper coastal plain from North Carolina to Alabama. The Atlas of the Virginia Flora (2007) does not include *H. lloydii*; this is the first record for that state.

Voucher specimen: **VIRGINIA: Mecklenburg Co.:** roadside of Virginia route 58, 7 Jul 1967, W.D. Seaman 7460 (NCU).

JUNCACEAE

Juncus articulatus L. A northern species that in eastern United States ranges south to Pennsylvania and New Jersey, with several records in the mountains of Virginia, West Virginia, and Kentucky (Brooks and Clemants 2000). The following provides label data for a curiously disjunct record from the seacoast of North Carolina. Although the specimen was annotated correctly in 1954 by W.T. Batson and included in Radford, Ahles, and Bell (1968), details of this record have not been published previously.

Voucher specimens: **NORTH CAROLINA: Dare Co.:** marsh at Cape Hatteras, 23 May 1954, A.E. Radford 8188 (NCU).

Juncus dudleyi Wiegand. This species of calcareous soils is not mapped in the deep southern United States by Brooks and Clemants (2000). However, the Alabama Flora Committee (2004) maps it in Bullock and Montgomery Counties. Thomas and Allen (1993) omit it from Louisiana; the following is the first documentation for Louisiana.

Voucher specimens: **LOUISIANA: Ouachita Parish:** cleared lots and woods off Lakeside St. in new Waterside Park Subdivision, E of Monroe, 7 May 1967, R.D. Thomas 2614 (NCU); **Winn Parish:** Cedar Creek, 3 mi E of Winnfield, open *Gleditsia* wood, 24 Apr 1955, G.R. Cooley 3686 with L.J. Brass (NCU).

Juncus interior Wiegand. This is a widespread midwestern species of prairies and prairie-like habitats. Brooks and Clemants (2000) map it in adjacent Louisiana, Arkansas, and Tennessee, but not Alabama and Mississippi. The Alabama Flora Committee (2004) maps it in Barbour County; Kartesz (1999) does not map it in Mississippi. This is the first record for Mississippi and second for Alabama.

Voucher specimens: **ALABAMA: Perry Co.:** four mi S of Marion on highway 5, open prairie, 15 May 1969, J.L. Thomas 2066 (NCU). **MISSISSIPPI: Bolivar Co.:** 5 mi W on Old Pace Road, P.O. Cleveland, 26 May 1960, H.L. Jacob 1351 (NCU).

Juncus militaris Bigelow. This northeastern species of lakes and ponds ranges south to Delaware, Maryland, and northern Indiana (Brooks and Clemants 2000). This is the first record for North Carolina, a disjunction of some 380 km. Plants are abundant in a dense but narrow band in 0.3–0.7 m of water in a very large Carolina bay lake.

Voucher specimens: **NORTH CAROLINA: Washington Co.:** Pettigrew State Park, SE side of Lake Phelps, emergent from shallow water with *Eriocaulon aquaticum* and *Xyris smalliana*, 4 Sep 2005, B.A. Sorrie 11715 with L. Mize, J. Mize (GH, NCSC, NCU, US).

Juncus nodatus Coville. This species of the southern midwest United States is notable for the ring-like bands on leaves at each cross-partition. These are the first records for Mississippi.

Voucher specimens: **MISSISSIPPI: Jackson Co.:** wet ditch, Ocean Springs, 9 May 1970, K.E. Rogers 3246-B (NCU); **Rankin Co.:** E shore of Barnett Reservoir between Safe Harbor Marina and Pelahatchie Bay area, locally abundant, 7 Oct 1972, K.E. Rogers 8812-A (NCU).

Juncus subcaudatus (Engelmann) Coville & S.F. Blake. This species is a relative of *J. canadensis* J. Gay, but nearly confined to the Appalachian Mountain system. Radford et al. (1968) do not include it for South Carolina; this is the first record.

Voucher specimen: **SOUTH CAROLINA: Oconee Co.:** Whitewater River NW of Jocassee, 2 Sep 1956, A.E. Radford 17875 (NCU).

LAMIACEAE

Pycnanthemum flexuosum (Walter) B.S.P. This coastal plain endemic ranges from Virginia to Alabama (Kartesz 1999). This is the first record for Mississippi. The specimen was determined by H.A. Gleason in 1960 as *P. setosum*, a closely related congener, but the specimen possesses narrow leaves characteristic of *P. flexuosum* (note: the drawings of these two species are reversed in Gleason 1952). It was on this collection that Kartesz (1999) based his Mississippi occurrence of *P. setosum*; therefore the latter record should be deleted, leaving *P. setosum* with a range of New Jersey to Florida.

Voucher specimen: **MISSISSIPPI: Pearl River Co.:** moist sandy grassy flat along railroad in cleared longleaf pineland, 2 mi S of Pica-yune, 26 May 1956, J.D. Ray, Jr. 6488 (NCU).

LENTIBULARIACEAE

Utricularia juncea Vahl. A New World species of wet acidic seepages, pine savannas, pond margins, and boggy wetlands, *U. juncea* in North America is restricted to the coastal plain from Long Island, New York to southern Florida and eastern Texas. This is the first record for Maryland, the species being omitted by Brown and Brown (1984).

Voucher specimen: **MARYLAND: Prince George Co.:** Suitland Bog, 13 Aug 1921, P.T. Newbold 708 (MO).

LILIACEAE

Aletris lutea Small. A widespread species of pine savannas and flatwoods, ranging from southern Georgia to south Florida to southeastern Louisiana. According to Thomas and Allen (1993), this is the first record from west of the Mississippi River.

Voucher specimen: **LOUISIANA: Vernon Parish:** Kisatchie National Forest, silt loam, level, burned over, T1S R8W Sec.14, 2 May 1940, E.L. Stone 21 (FSU).

OROBANCHACEAE

Agalinis divaricata (Chapman) Pennell. Outside of Florida, this species was heretofore known only from three southern Alabama counties (specimens at FSU, GH, NCU). Jones and Coile (1988) do not include it for Georgia; this is the first published record for that state.

Voucher specimen: **GEORGIA: Decatur Co.:** in dry sandy soil, E side of airstrip road at L/S [Lake Seminole], 15 Sep 1973, A. Gholson s.n. (FSU).

Agalinis filifolia (Nuttall) Raf. This species ranges throughout Florida and southeastern Georgia. Pennell (1929) cited an old Gates specimen from Alabama that lacked location data; the Alabama Flora Committee (2004) mapped it in Baldwin County. These are the first modern records for Alabama.

Voucher specimens: **ALABAMA: Baldwin Co.:** dry sandy open woods N of sand dunes along Gulf of Mexico, highway 180 between Gulf Shores and Fort Morgan State Park, 7 Oct 1967, M.H. Lelong 3850 (NCU); same place and date, B.E. Wofford 10192 (NCU); Bon Secour National Wildlife Refuge, W of Little Lagoon, 29 Sep 1997, B.A. Sorrie 9573 with R.J. LeBlond (AUA, GH, NCU).

PLANTAGINACEAE

Leucospora multifida (Michx.) Nuttall. *Leucospora* prefers moist to wet sandy or muddy shores and depressions, including disturbed habitats. It is widespread in eastern North America, but rare along the Atlantic Coastal Plain, with the North Carolina population disjunct from the panhandle of Florida. This is the only known specimen for North Carolina. Kartesz (1999) maps it in North Carolina and cites Weakley (1997) as the source; we here give full details of this record.

Voucher specimen: **NORTH CAROLINA: Carteret Co.:** Cherry Point Marine Corps Outlying Field Atlantic, NW of the community of Atlantic, in borrow pond within NW corner of runway complex, 2 Sep 1993, R.J. LeBlond 3544 (NCU).

POACEAE

Dichanthelium annulum (Ashe) LeBlond. Within the *Dichotoma* group, *D. annulum* is one of the most distinct taxa (LeBlond 2001), with its relatively tall stature, soft villous foliage, short hairy upper internodes, minute ligules, and bearded nodes. Freckmann and Lelong (2003a) synonymize it under *D. dichotomum* (L.) Gould ssp. *mattamuskeetense* (Ashe) Freckmann & Lelong, but that taxon differs in its glabrate leaves, larger spikelets, coastal plain distribution, and affinity for wet acidic soils. *Dichanthelium annulum* ranges from New Jersey to Missouri, south to Georgia and Mississippi; it inhabits open woodlands, glades, and barrens, often in high pH substrates. This represents the first collection in North Carolina since 1968.

Voucher specimen: **NORTH CAROLINA: Stanly Co.:** Morrow Mountain State Park, north slope of Biles Mountain, common in graminoid dominated glade-like woodland under *Quercus alba*, *Q. stellata*, *Carya glabra*, *Cercis canadensis*, *Pinus echinata*, 1 Jun 2007, B.A. Sorrie 11963 (NCU).

Panicum dichotomiflorum Michx. var. **puritanorum** Svenson. This represents the first vouchered report of this rare grass from Delaware and possibly the entire Delmarva Peninsula. *Panicum dichotomiflorum* var. *puritanorum* ranges along the coastal plain from Nova Scotia and New Hampshire south to Virginia, with disjunct occurrences around Lake Michigan in Indiana and Illinois. It is found primarily in wet sands and organic soils of seasonally exposed pond and lake shores. It was previously reported from Delaware by R.A. Ralph in an undated manuscript at the University of Delaware (Kartesz 1999). This manuscript was prepared sometime prior to 1992 while Ralph was a student at the College of Marine Studies in Lewes (McAvoy pers. comm.). No voucher specimen for this report has been located. Plants from Delaware northward typically have slender culms 0.3–6 dm long and leaves 1–8 mm wide. Plants with floral characters of var. *puritanorum* but with stout culms 0.8–2 m long and leaves 7–25 mm wide (similar to var. *dichotomiflorum*) occur in bottomlands in southeastern Virginia, and have been recognized as *P. dichotomiflorum* var. *imperatorum* Fernald (Fernald 1942). These plants are currently regarded as belonging to var. *puritanorum* by Weakley (2007) and presumably are the source of the inclusion of Virginia within the range by Freckmann and Lelong (2003b). The Virginia plants need further study.

Voucher specimen: **DELAWARE: Sussex Co.:** Huckleberry Pond, SE of Milford and NW of Broadkill Beach, 17 Sep 1991, R.J. LeBlond 2554 with B.A. Sorrie and W.A. McAvoy (DOV).

POLYGALACEAE

Polygala leptostachys Shuttleworth. This essentially Floridian species is rare outside of that state, known from only a few specimens in Georgia (Jones and Coile 1988) and Mississippi (Kartesz 1999). This is the first published record for Alabama. Al Schotz (pers. comm.) informed us that he has found it in Baldwin and Geneva Counties.

Voucher specimen: **ALABAMA: Escambia Co.:** Conecuh National Forest, N of road to Hines Lake, dry to xeric knoll in longleaf pine-wiregrass-shrub flatwoods, 6 Aug 1996, B.A. Sorrie 8974 (AUA, GH).

POLYGONACEAE

Polygonum glaucum Nutt. This plant of maritime foredunes and accreting beaches ranges from Massachusetts to north Florida, almost exclusively on the Atlantic coast. The Atlas of Florida Vascular Plants (2007) maps it only in Duval and Gulf Counties. This is the second record for the Gulf coast of Florida.

Voucher specimen: **FLORIDA: Franklin Co.:** Saint Vincent Island, open dry sand dunes, 25 Jun 1936, D.S. Correll 5583 (DUKE).

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